

CLAIMS

1. A radio communication system that performs a radio communication between a stationary information device and a mobile terminal device, wherein

5 the stationary information device includes

a first radio communication unit that performs a radio communication to detect an approach of the mobile terminal device;

a detecting unit that detects the approach of the
10 mobile terminal device based on a result of the radio communication by the first radio communication unit; and

an attracting unit that generates, when the detecting unit detects the approach of the mobile terminal device, an attraction force for attracting and fixing the
15 mobile terminal device, and

the mobile terminal device includes

a second radio communication unit that performs a radio communication to detect an approach of the stationary information device; and

20 an attracted unit that is attracted to the attraction force generated by the stationary information device.

2. The radio communication system according to claim 1,
25 wherein

the attraction force for attracting and fixing the

mobile terminal device is an electromagnetic attraction force.

3. The radio communication system according to claim 1,
5 wherein

the stationary information device further includes a third radio communication unit that performs a radio communication with the mobile terminal device by using a frequency band more expanded than a unit frequency band in
10 a state in which a transmission power per unit frequency band is set to be lower than a predetermined value, and

the mobile terminal device further includes a fourth radio communication unit that performs a radio communication with the stationary information device by
15 using a frequency band more expanded than a unit frequency band in a state in which a transmission power per unit frequency band is set to be lower than a predetermined value.

20 4. The radio communication system according to claim 1, wherein

the stationary information device further includes a fixation determining unit that determines a completion of attracting and fixing the mobile terminal device with the
25 attraction force.

5. The radio communication system according to claim 1,
wherein

the first radio communication unit is an RFID
reader/writer, and

5 the second radio communication unit is a radio tag.

6. The radio communication system according to claim 1,
wherein

an intensity of the attraction force is adjustable.

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7. A stationary information device comprising:

a first radio communication unit that performs a radio
communication to detect approach of an external device;

a detecting unit that detects the approach of the
15 external device based on a result of the radio

communication by the first radio communication unit; and

an attracting unit that generates, when the detecting
unit detects the approach of the external device, an
attraction force for attracting and fixing the external
20 device.

8. The stationary information device according to claim 7,
wherein

the attraction force for attracting and fixing the
25 mobile terminal device is an electromagnetic attraction
force.

9. The stationary information device according to claim 7,
further comprising:

5 a second radio communication unit that performs a
radio communication with the external device by using a
frequency band more expanded than a unit frequency band in
a state in which a transmission power per unit frequency
band is set to be lower than a predetermined value.

10 10. The stationary information device according to claim 7,
further comprising:

a fixation determining unit that determines a
completion of attracting and fixing the external device
with the attraction force.

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11. The stationary information device according to claim 7,
wherein

the first radio communication unit is an RFID
reader/writer.

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12. The stationary information device according to claim 7,
wherein

an intensity of the attraction force is adjustable.

25 13. A mobile terminal device comprising:

a first radio communication unit that performs a radio

communication to detect an approach of an external device;
and

an attracted unit that is attracted to an attraction
force generated by the external device.

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14. The mobile terminal device according to claim 13,
further comprising:

a second radio communication unit that performs a
radio communication with the external device by using a
10 frequency band more expanded than a unit frequency band in
a state in which a transmission power per unit frequency
band is set to be lower than a predetermined value.

15. The mobile terminal device according to claim 13,
15 wherein

the first radio communication unit is a radio tag.